FOR OFFICIAL USE ONLY

ACCESS DB # 177473

PLEASE PRINT CLEARLY

Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: MARK BERCH Examiner #: 59193 Date: 1/24/06

Art Unit: 1624 Phone Number: 2- 0663 Serial Number: 10813954

Location (Bldg/Room#): 5C01 (Mailbox #): 5C18 Results Format Preferred (circle): (PAPER) DISK

****

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: _____

Inventors (please provide full names): _____

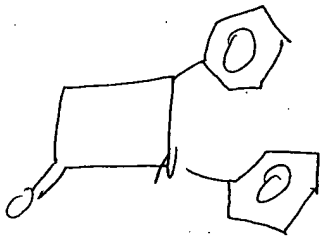
_____

Earliest Priority Date: _____

Search Topic:

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

For Sequence Searches Only *Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*



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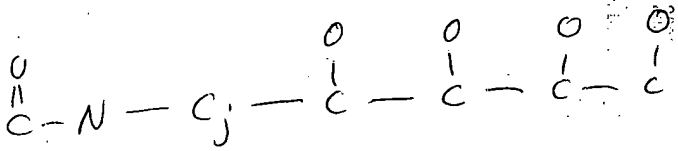

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STAFF USE ONLY

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Searcher Phone #: _____

Searcher Location: _____

Date Searcher Picked Up: _____

Date Completed: _____

Searcher Prep & Review Time: _____

Online Time: _____

Type of Search

_____ NA Sequence (#)

_____ AA Sequence (#)

_____ Structure (#)

_____ Bibliographic

_____ Litigation

_____ Fulltext

_____ Other

Vendors and cost where applicable

_____ STN _____ Dialog

_____ Questel/Orbit _____ Lexis/Nexis

_____ Westlaw _____ WWW/Internet

____ In-house sequence systems

___Commercial ___Oligomer ____Score/Length

___ Interference ___ SPDI ____ Encode/Transl

_____ Other (specify)

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=> d his ful

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L2           0 SEA SSS SAM L1
L3          12 SEA SSS FUL L1

     FILE 'HCAPLUS' ENTERED AT 09:33:51 ON 02 FEB 2006
L4           6 SEA ABB=ON  PLU=ON  L3

     FILE 'BEILSTEIN' ENTERED AT 09:34:05 ON 02 FEB 2006
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L6           1 SEA ABB=ON  PLU=ON  L5/COM

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L9           3 SEA SSS FUL L7
L10          2 SEA ABB=ON  PLU=ON  L9/COM
L11          0 SEA ABB=ON  PLU=ON  L10 NOT L4


     FILE HOME

     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
     provided by InfoChem.

     STRUCTURE FILE UPDATES:   31 JAN 2006  HIGHEST RN 873191-05-0
     DICTIONARY FILE UPDATES:  31 JAN 2006  HIGHEST RN 873191-05-0

     New CAS Information Use Policies, enter HELP USAGETERMS for details.

     TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

       Please note that search-term pricing does apply when
       conducting SmartSELECT searches.

     ************************************************************
     *                                                          *
     * The CA roles and document type information have been removed from *
     * the IDE default display format and the ED field has been added,   *
     * effective March 20, 2005.  A new display format, IDERL, is now    *
     * available and contains the CA role and document type information. *
     *                                                          *
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     Structure search iteration limits have been increased.  See HELP SLIMITS
     for details.

     REGISTRY includes numerically searchable data for experimental and
     predicted properties as well as tags indicating availability of
     experimental property data in the original document.  For information
     on property searching in REGISTRY, refer to:

     http://www.cas.org/ONLINE/UG/regprops.html
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FILE HCAPLUS

FILE COVERS 1907 - 2 Feb 2006 VOL 144 ISS 6
FILE LAST UPDATED: 1 Feb 2006 (20060201/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE BEILSTEIN
FILE LAST UPDATED ON JANUARY 17, 2006

FILE COVERS 1771 TO 2005.
FILE CONTAINS 9,428,406 SUBSTANCES

>>>PLEASE NOTE: Reaction Data and substance data are stored in separate documents and can not be searched together in one query. Reaction data for BEILSTEIN compounds may be displayed immediately with the display codes PRE (preparations) and REA (reactions). A substance answer set retrieved after the search for a chemical name, a compounds with available reaction information by combining with PRE/FA, REA/FA or more generally with RX/FA. The BEILSTEIN Registry Number (BRN) is the link between a BEILSTEIN compound and belonging reactions. For mo detailed reaction searches BRNs can be searched as reaction partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

****
* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST. *
* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE *
* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE *
* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS. *
* FOR PRICE INFORMATION SEE HELP COST *
****

NEW

*** PATENT NUMBERS (PN) AND BABS ACCESSION NUMBERS (BABSAN) CAN NOW BE SEARCHED, SELECTED AND TRANSFERRED.**
*** NEW DISPLAY FORMATS ALLREF, ALLP AND BABSAN SHOW ALL REFERENCES, ALL PATENT REFERENCES, OR ALL BABS ACCESSION NUMBERS FOR A COMPOUND AT A GLANCE.**

FILE MARPAT
FILE CONTENT: 1969-PRESENT (VOL 144 ISS 5 (20060127/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1969-1987

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6962795 08 NOV 2005
DE 1020040544 17 NOV 2005
EP 1595877 16 NOV 2005
JP 2005328067 24 NOV 2005
WO 2005112644 01 DEC 2005

Expanded G-group definition display now available.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 31 JAN 2006 HIGHEST RN 873191-05-0
DICTIONARY FILE UPDATES: 31 JAN 2006 HIGHEST RN 873191-05-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

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*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
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Structure search iteration limits have been increased. See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

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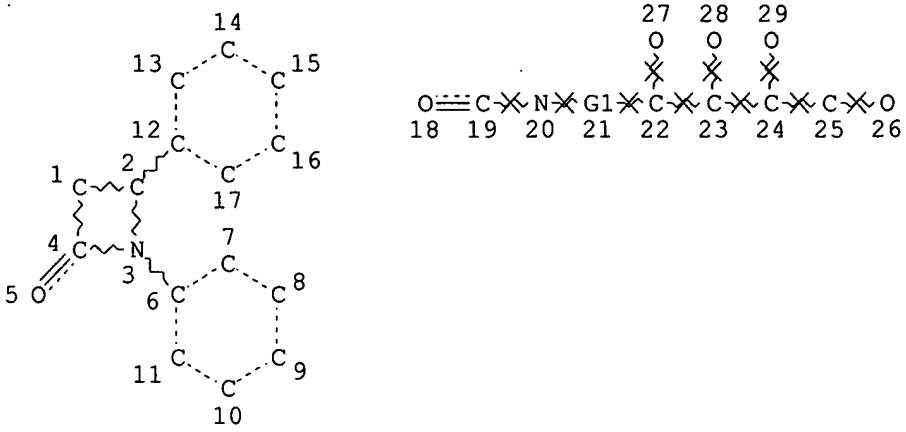
L1 STR



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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 29

STEREO ATTRIBUTES: NONE
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100.0% PROCESSED 5319 ITERATIONS 12 ANSWERS
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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 2 Feb 2006 VOL 144 ISS 6
FILE LAST UPDATED: 1 Feb 2006 (20060201/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

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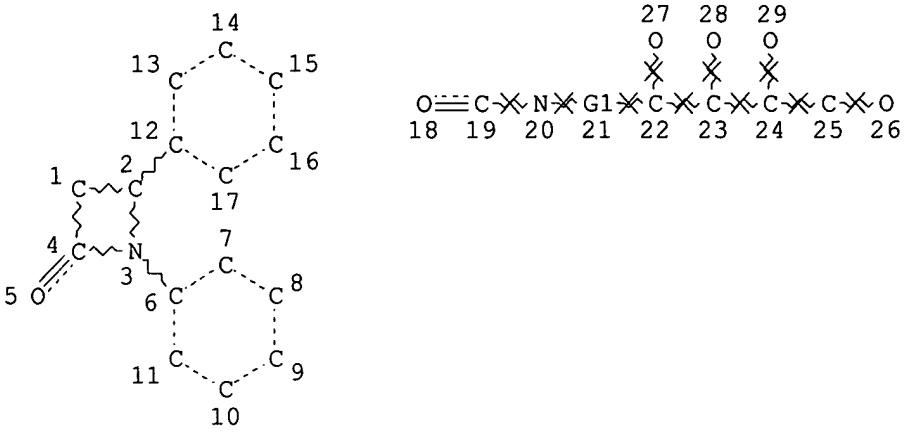
L1 STR



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NUMBER OF NODES IS 29

STEREO ATTRIBUTES: NONE
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L4 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L3

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L4 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:588892 HCAPLUS
DOCUMENT NUMBER: 143:133694
TITLE: Preparation of diphenylazetidinone amino acid derivatives having cholesterol absorption inhibitory activity
INVENTOR(S): Alenfalk, Susanne; Dahlstroem, Mikael; Hunegnaw, Fana; Karlsson, Staffan; Lemurell, Malin; Lindqvist, Ann-Margret; Skjaeret, Tore; Starke, Ingemar
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.
SOURCE: PCT Int. Appl., 189 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005061452	A1	20050707	WO 2004-SE1960	20041221

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,

NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2003-29780 A 20031223
SE 2004-1907 A 20040721
SE 2004-2785 A 20041115

OTHER SOURCE(S): MARPAT 143:133694

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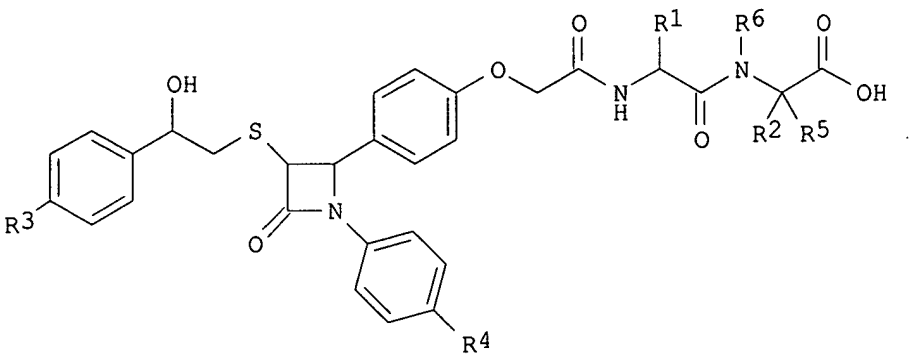


I

AB The invention relates to diphenylazetidinones I [R1, R2, R5 are independently H, (un)substituted alkyl, cycloalkyl or aryl; R3 is H, alkyl, halo, alkoxy or alkylthio; R4 is H, alkyl, halo or alkoxy; R6 is H, alkyl or arylalkyl; or R2 may form a ring with R5 or R6], or their pharmaceutically-acceptable salts, solvates, and prodrugs, and their use as cholesterol absorption inhibitors for the treatment of hyperlipidemia. Thus, 2-azetidinone I [R3, R4 = F; NHCHR1CONR6CR2R5CO2H = Gly-L-Ser-OH (R-configuration at 3- and 4-positions of the azetidine ring)], prepared by peptide coupling and LiAlH4 reduction of the benzoyl oxo group, showed 87% inhibition of 14C-cholesterol absorption.

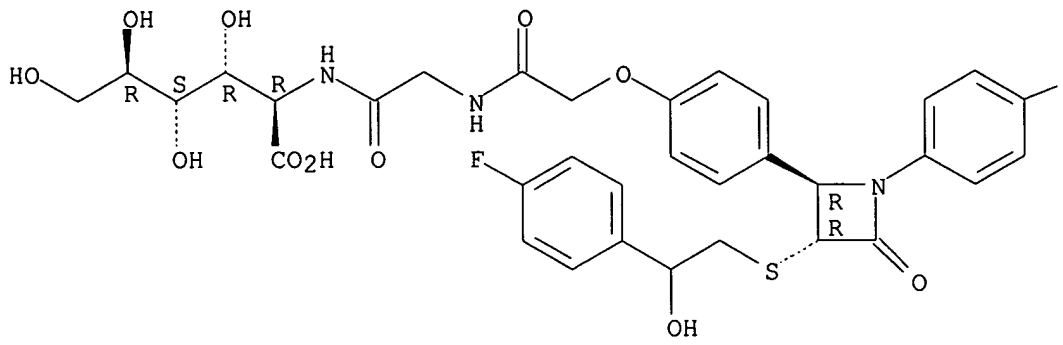
IT **858103-64-7P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of diphenylazetidinone amino acid derivs. having cholesterol absorption inhibitory activity)

RN 858103-64-7 HCAPLUS

CN D-Gluconic acid, 2-deoxy-2-[[[[[4-[(2R,3R)-1-(4-fluorophenyl)-3-[[2-(4-fluorophenyl)-2-hydroxyethyl]thio]-4-oxo-2-azetidinyl]phenoxy]acetyl]amino]acetyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

F

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:857559 HCAPLUS
DOCUMENT NUMBER: 141:314568
TITLE: Novel diphenyl azetidinone with improved physiological characteristics, corresponding production method, medicaments containing said compound and use of the latter
INVENTOR(S): Jaehne, Gerhard; Frick, Wendelin; Lindenschmidt, Andreas; Flohr, Stefanie; Heuer, Hubert; Schaefer, Hans-Ludwig; Kramer, Werner; Galia, Eric; Glombik, Heiner
PATENT ASSIGNEE(S): Aventis Pharma Deutschland GmbH, Germany
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087655	A1	20041014	WO 2004-EP2690	20040316

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
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DE 10314610	A1	20041104	DE 2003-10314610		20030401
CA 2520689	AA	20041014	CA 2004-2520689		20040316
EP 1613589	A1	20060111	EP 2004-720854		20040316
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OTHER SOURCE(S): MARPAT 141:314568

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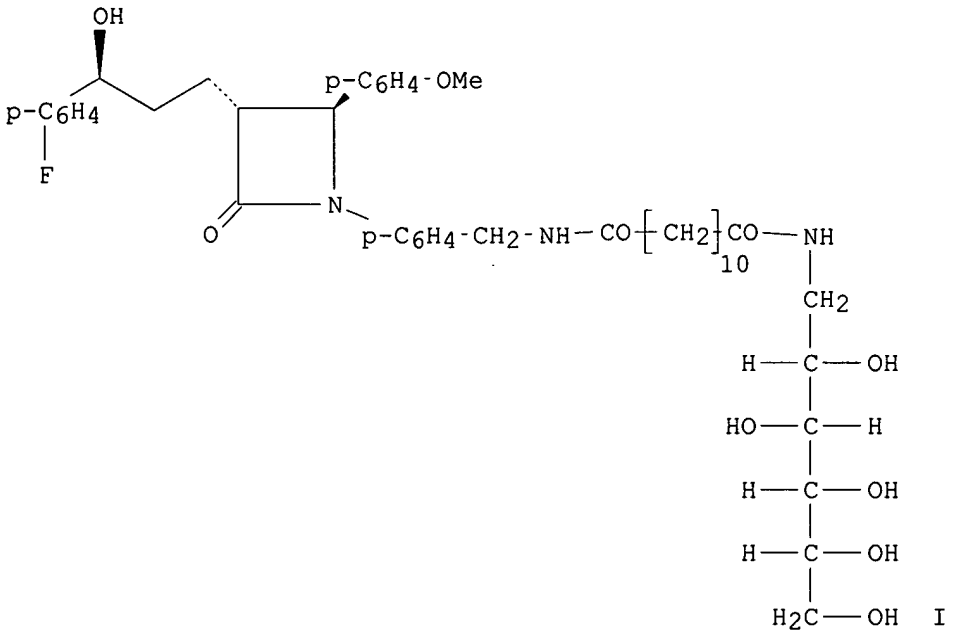


I

AB The invention relates to a novel di-Ph azetidinone (I) and its physiol. compatible salts, to a method for its production, to medicaments containing said compound and to the use of the latter. Said compound is suitable for use for example as a hypolipidemic agent. Thus, dodecanedioic acid was reacted with thionyl chloride followed by MeOH to give a monomethyl ester, which was then reacted with glucamine and deesterified to give the monoamide intermediate (II). II was reacted with the previously known (2S,3R)-1-(4-aminomethylphenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-methoxyphenyl)azetidin-2-one to give I in 32% yield. In in vitro tests on mice, I had ED50 0.005 mg/mouse for 50% reduction of liver 14C-labeled cholesterol. In solubility tests, compared to a similar reference compound, I had better solubility in water, at pH's 1.2, 4.5, 6.8, and 8.0, and in both fasted- (28 μg/mL vs 5) and fed-state simulating intestinal fluids (454 μg/mL vs 18) (FaSSIF and FeSSIF).

IT **768394-99-6P**

RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); THU

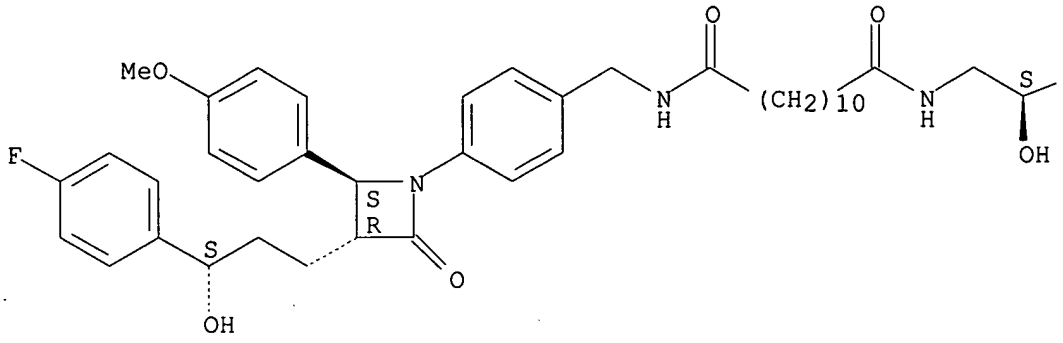
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 1,2-diphenylazetidinone alditol derivs. for use as hypolipidemics for treatment of hyperlipidemia)

RN 768394-99-6 HCAPLUS

CN D-Glucitol, 1-deoxy-1-[[12-[[[4-[(2S,3R)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-2-(4-methoxyphenyl)-4-oxo-1-azetidinyl]phenyl]methyl]amino]-1,12-dioxododecyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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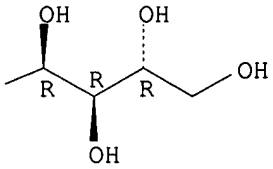


IT **768394-97-4P**

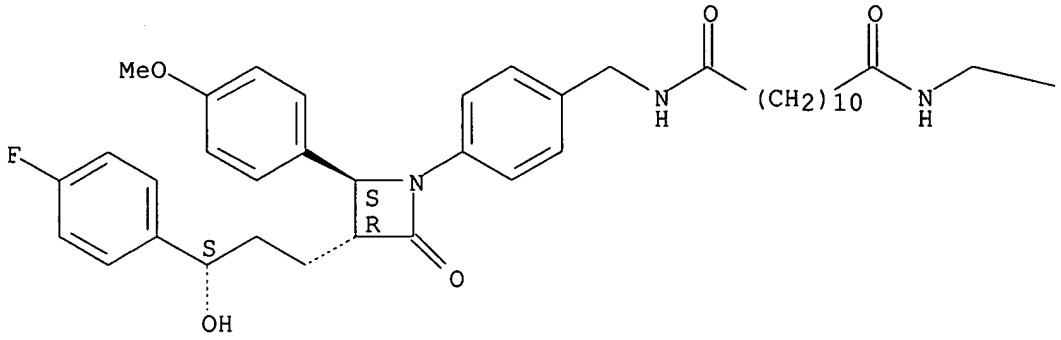
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 1,2-diphenylazetidinone alditol derivs. for use as hypolipidemics for treatment of hyperlipidemia)

RN 768394-97-4 HCAPLUS

CN D-Glucitol, 1-deoxy-1-[[12-[[[4-[(2S,3R)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-2-(4-methoxyphenyl)-4-oxo-1-azetidinyl]phenyl]methyl]amino]-1,12-dioxododecyl]amino]-, 2,3,4,5,6-pentaacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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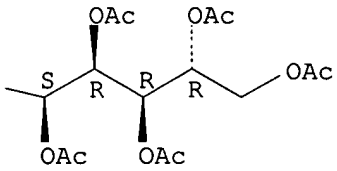

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:41434 HCAPLUS
DOCUMENT NUMBER: 140:111687
TITLE: Preparation of diphenylazetidinone peptide derivatives for treating disorders of lipid metabolism
INVENTOR(S): Starke, Ingemar; Dahlstrom, Mikael Ulf Johan; Lindqvist, Ann-Margret; Nordberg, Mats Peter; Skjaret, Tore; Lemurell, Malin Anita
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.; Astrazeneca UK Limited
SOURCE: PCT Int. Appl., 134 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004005247	A1	20040115	WO 2003-GB2811	20030701
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CA 2491789	AA	20040115	CA 2003-2491789	20030701
BR 2003012280	A	20050412	BR 2003-12280	20030701

EP 1521742 A1 20050413 EP 2003-762763 20030701
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US 2005239766 A1 20051027 US 2004-519897 20041231
NO 2005000016 A 20050301 NO 2005-16 20050103
PRIORITY APPLN. INFO.: GB 2002-15579 A 20020705
WO 2003-GB2811 W 20030701
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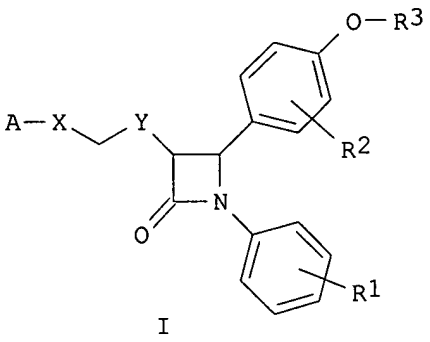


I

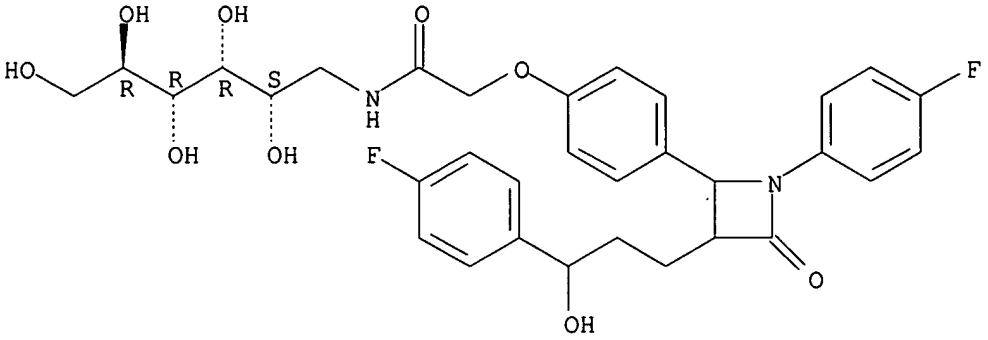
AB Azetidinone derivs. I [A is (un)substituted Ph or thienyl; X, Y are (un)substituted methylene, O, NH, alkylimino, S, SO, or SO2; R1, R2 are H, halo, nitro, cyano, etc.; R3 is (CHR4)1-2CONR5CR6R7(CHR8)0-2R9, where R4, R6, R7, R8 are H, (un)substituted alkyl, carbocyclyl, or heterocyclyl or R6R7 is alkylene; R5 is H or alkyl; R9 is H, halo, nitro, amino, carbamoyl, sulfamoyl, hydroxyaminocarbonyl, alk(en)(yn)yl, alkoxy, alkoxycarbonyl, alkylamino, etc.] or their pharmaceutically-acceptable salts or prodrugs were prepared for use as cholesterol absorption inhibitors for the treatment of hyperlipidemia. Thus, 1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-carboxymethoxyphenyl)azetidin-2-one and tert-Bu N-[(2R)-2-amino-2-phenylethanoyl]glycinate were prepared and reacted to form the carboxamide.

IT **646523-74-2P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of diphenylazetidinone peptide derivs. for treating disorders of lipid metabolism)

RN 646523-74-2 HCAPLUS

CN D-Glucitol, 1-deoxy-1-[[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenoxy]acetyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:2850 HCAPLUS
DOCUMENT NUMBER: 140:77013
TITLE: Preparation of diphenylazetidinones for the treatment of hyperlipidemia, arteriosclerosis and hypercholesterolemia
INVENTOR(S): Jaehne, Gerhard; Frick, Wendelin; Flohr, Stefanie; Lindenschmidt, Andreas; Glombik, Heiner; Kramer, Werner; Heuer, Hubert; Schaefer, Hans-Ludwig
PATENT ASSIGNEE(S): Aventis Pharma Deutschland G.m.b.H., Germany
SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004000804	A1	20031231	WO 2003-EP5815	20030604
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10227506	A1	20040108	DE 2002-10227506	20020619
CA 2490109	AA	20031231	CA 2003-2490109	20030604
EP 1517892	A1	20050330	EP 2003-760591	20030604
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003011940	A	20050405	BR 2003-11940	20030604
NZ 537304	A	20051028	NZ 2003-537304	20030604
JP 2005533072	T2	20051104	JP 2004-514660	20030604
US 2004082561	A1	20040429	US 2003-463807	20030618
NO 2005000073	A	20050106	NO 2005-73	20050106
PRIORITY APPLN. INFO.:			DE 2002-10227506 A	20020619
			US 2002-411984P P	20020919

WO 2003-EP5815 W 20030604

OTHER SOURCE(S): MARPAT 140:77013
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

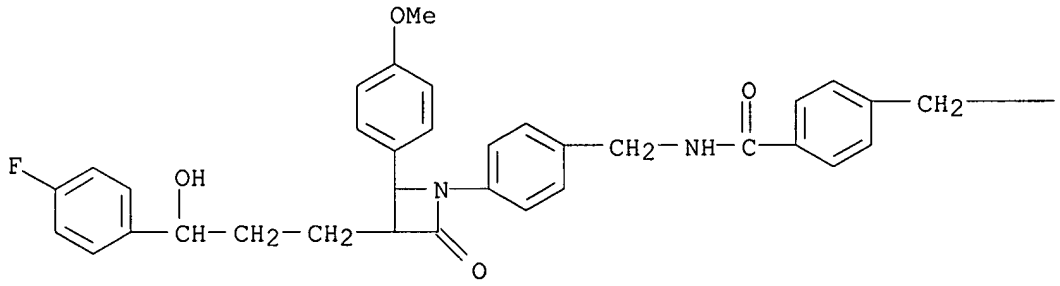
AB Title compds. I [R1, R2, R3, R4, R5, R6 = (un)substituted alkylene-(LAG)n; n = 1-5; LAG = sugar; amino sugar; amino acid, etc.] and their pharmaceutically acceptable salts were prepared For example, N-alkylation of 1,4-diazabicyclo[2.2.2]octane with benzyl bromide II, e.g., prepared from 1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)-2-azetidinone and 1,2-bisbromomethylbenzene, afforded diphenylazetidinone III. In rat liver chloresterol absorption assays, 26-examples of compds. I exhibited EC50 values ranging from 0.03-<1.0 (mg/mouse), e.g., the EC50 value of diphenylazetidinone III was 0.3. Compds. I are claimed useful for the treatment of hyperlipidemia, arteriosclerosis and hypercholesterolemia.

IT **640330-69-4P 641614-30-4P 641614-31-5P**
641614-40-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(target compound; preparation of diphenylazetidinones for the treatment of hyperlipidemia, arteriosclerosis and hypercholesterolemia)

RN 640330-69-4 HCAPLUS

CN Hexitol, 1-deoxy-1-[[4-[[4-[[[[4-[3-[3-(4-fluorophenyl)-3-hydroxypropyl]-2-(4-methoxyphenyl)-4-oxo-1-azetidinyl]phenyl]methyl]amino]carbonyl]phenyl]methyl]benzoyl]amino]- (9CI) (CA INDEX NAME)

PAGE 1-A



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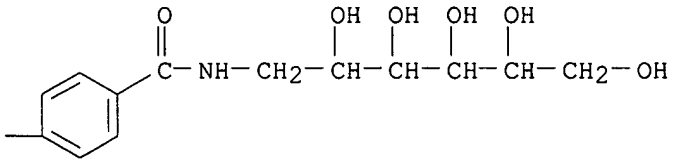
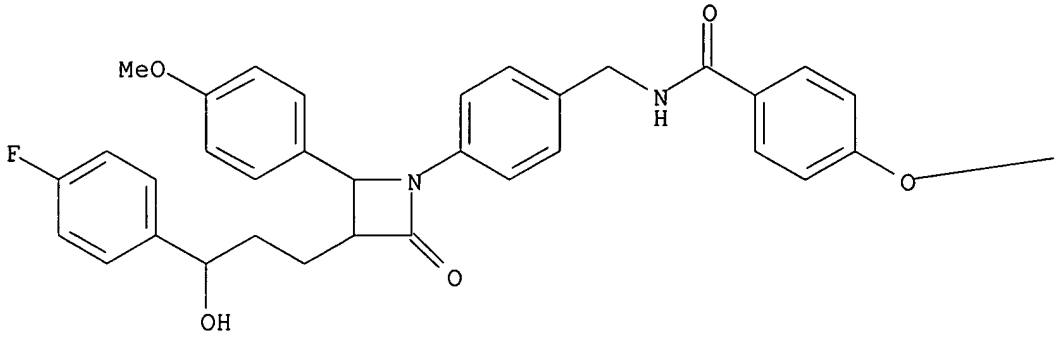


RN 641614-30-4 HCAPLUS

CN D-Glucitol, 1-deoxy-1-[[4-[4-[[[[4-[3-[3-(4-fluorophenyl)-3-hydroxypropyl]-2-(4-methoxyphenyl)-4-oxo-1-azetidinyl]phenyl]methyl]amino]carbonyl]phenoxy]benzoyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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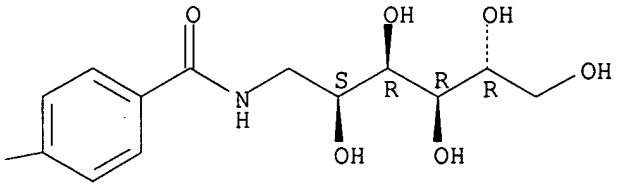
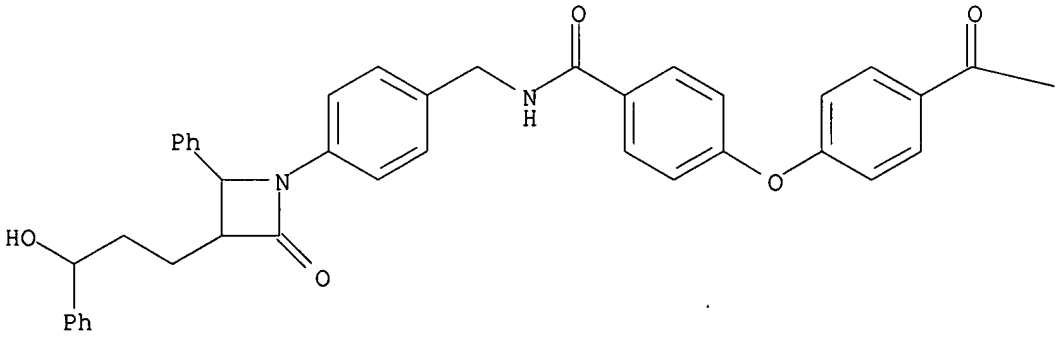


RN 641614-31-5 HCAPLUS

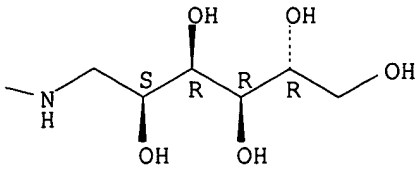
CN D-Glucitol, 1-deoxy-1-[[4-[4-[[[[4-[3-(3-hydroxy-3-phenylpropyl)-2-oxo-4-phenyl-1-azetidinyl]phenyl]methyl]amino]carbonyl]phenoxy]benzoyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



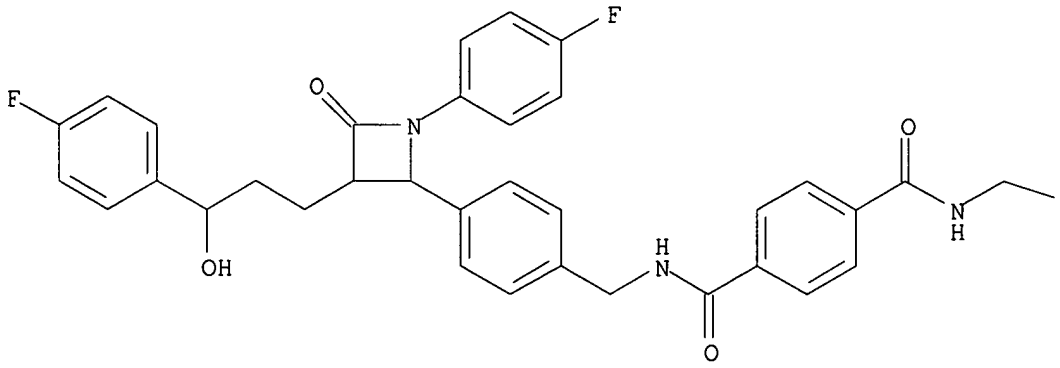
PAGE 1-B



RN 641614-40-6 HCAPLUS
CN D-gluco-Heptitol, 1,2-dideoxy-1-[[4-[[[[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]methyl]amino]carbonyl]benzoyl]amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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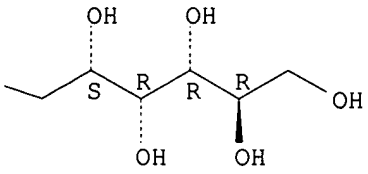


REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:487523 HCAPLUS
DOCUMENT NUMBER: 137:63113
TITLE: Method for producing novel 1,2-diphenylazetidinones, medicaments containing them, and their use for treating disorders of lipid metabolism
INVENTOR(S): Glombik, Heiner; Kramer, Werner; Flohr, Stefanie;

Frick, Wendelin; Heuer, Hubert; Jaehne, Gerhard;
Lindenschmidt, Andreas; Schaefer, Hans-Ludwig
PATENT ASSIGNEE(S): Aventis Pharma Deutschland GmbH, Germany
SOURCE: PCT Int. Appl., 77 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2002050027	A1	20020627	WO 2001-EP14531		20011211
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
DE 10064398	A1	20020627	DE 2000-10064398		20001221
DE 10152981	A1	20030508	DE 2001-10152981		20011026
CA 2431983	AA	20020627	CA 2001-2431983		20011211
AU 2002016097	A5	20020701	AU 2002-16097		20011211
EE 200300236	A	20030815	EE 2003-236		20011211
EP 1345895	A1	20030924	EP 2001-271353		20011211
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
BR 2001016325	A	20031014	BR 2001-16325		20011211
JP 2004516280	T2	20040603	JP 2002-551524		20011211
NZ 526593	A	20050225	NZ 2001-526593		20011211
US 2002137689	A1	20020926	US 2001-21502		20011219
US 6992067	B2	20060131			
ZA 2003004093	A	20040423	ZA 2003-4093		20030527
NO 2003002734	A	20030818	NO 2003-2734		20030616
US 2005267038	A1	20051201	US 2005-155109		20050617
PRIORITY APPLN. INFO.:			DE 2000-10064398	A	20001221
			DE 2001-10152981	A	20011026
			WO 2001-EP14531	W	20011211
			US 2001-21502	A3	20011219

OTHER SOURCE(S): CASREACT 137:63113; MARPAT 137:63113
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to the compds. I [R1, R2, R3, R4, R5, R6 = C0-30-alkylene-LAG {optionally containing O, CO, CH:CH, C.tplbond.C, N(C1-6-alkyl), N(C1-6-alkylphenyl), NH}, H, F, Cl, Br, I, CF3, NO2, CN, CO2H, CO2(C1-6-alkyl), CONH, CONH(C1-6-alkyl), CON(C1-6-alkyl)2, C1-6-alkyl, C1-6-alkenyl, C1-6-alkynyl, O-(C1-6-alkyl), SO2NH2, SO2NH(C1-6-alkyl) SO2N(C1-6-alkyl)2, S-(C1-6-alkyl), SO(C1-6-alkyl), (un)substituted S(CH2)nPh, SO(CH2)nPh, SO2(C1-6-alkyl), SO2(CH2)nPh, NH2, NH(C1-6-alkyl), N(C1-6-alkyl)2, NH(C1-6-acyl), (un)substituted Ph, O(CH2)nPh; LAG = sugar residue, di-, tri-, tetrasaccharide, carbohydrate

acid, amino sugar, amino acid, oligopeptide (2 - 9 residues), (trialkylammonium)alkyl, OSO3H] and to their physiol. acceptable salts, suitable, for example, as hypolipidemics. Thus, 1,2-diphenylazetidinone II [R10 = CO(CH2)11NHCO(CHOH)4CH2OH] was prepared from (methoxyphenyl)azetidinone II (R10 = H) via N-acylation with 12-[(2,3,4,5,6-pentahydroxyhexanoyl)amino]dodecanoic acid. Azetidinone II was tested for its cholesterol lowering ability [ED50 = 0.003 mg/mouse].

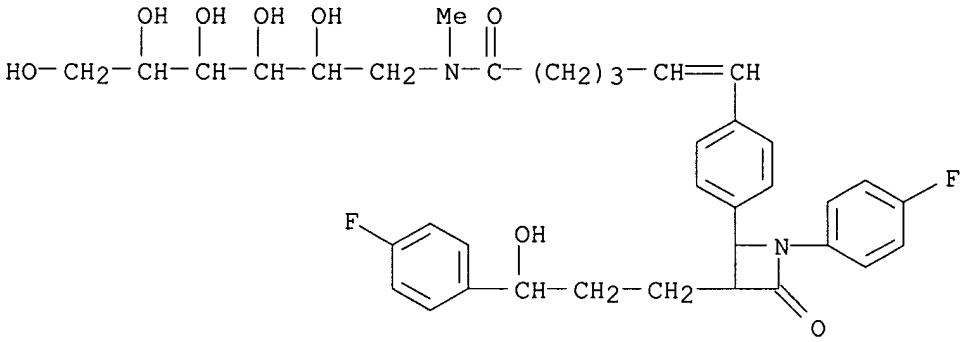
IT **439080-89-4P 439080-95-2P**

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of novel 1,2-diphenylazetidinones as hypolipidemics)

RN 439080-89-4 HCAPLUS

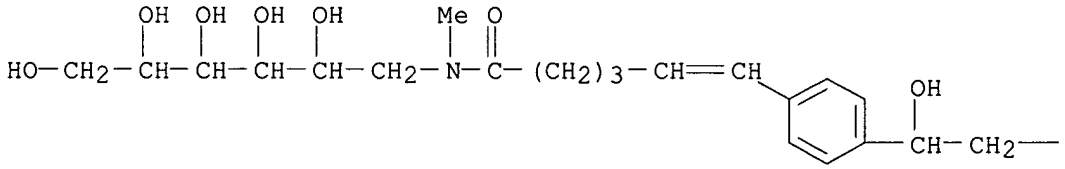
CN Hexitol, 1-deoxy-1-[[6-[4-[1-(4-fluorophenyl)-3-[3-(4-fluorophenyl)-3-hydroxypropyl]-4-oxo-2-azetidinyl]phenyl]-1-oxo-5-hexenyl]methylamino]- (9CI) (CA INDEX NAME)

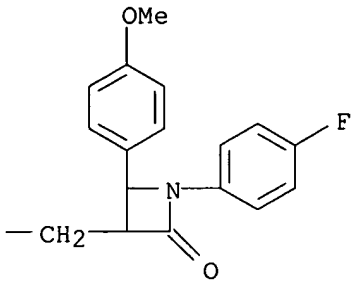


RN 439080-95-2 HCAPLUS

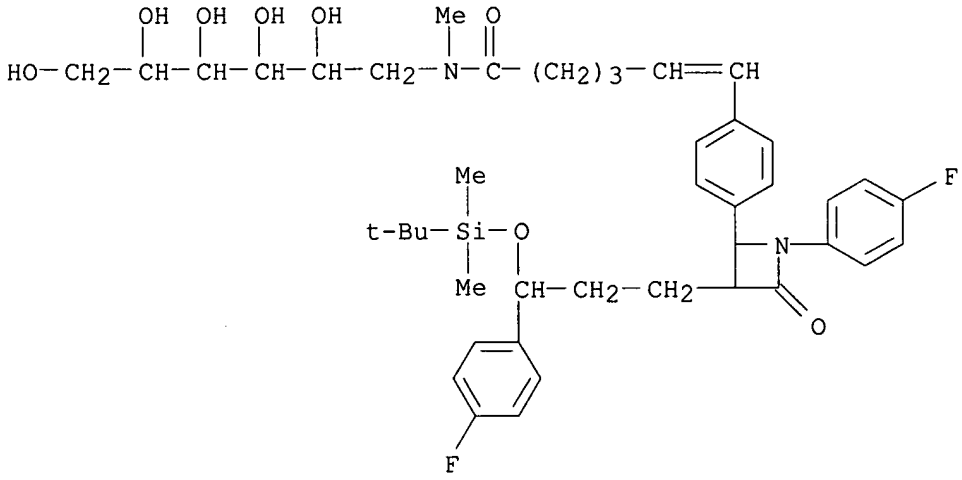
CN Hexitol, 1-deoxy-1-[[6-[4-[3-[1-(4-fluorophenyl)-2-(4-methoxyphenyl)-4-oxo-3-azetidinyl]-1-hydroxypropyl]phenyl]-1-oxo-5-hexenyl]methylamino]- (9CI) (CA INDEX NAME)

PAGE 1-A





IT **439080-88-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of novel 1,2-diphenylazetidinones as hypolipidemics)
RN 439080-88-3 HCAPLUS
CN Hexitol, 1-deoxy-1-[[6-[4-[3-[3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3-(4-fluorophenyl)propyl]-1-(4-fluorophenyl)-4-oxo-2-azetidinyl]phenyl]-1-oxo-5-hexenyl]methylamino]- (9CI) (CA INDEX NAME)

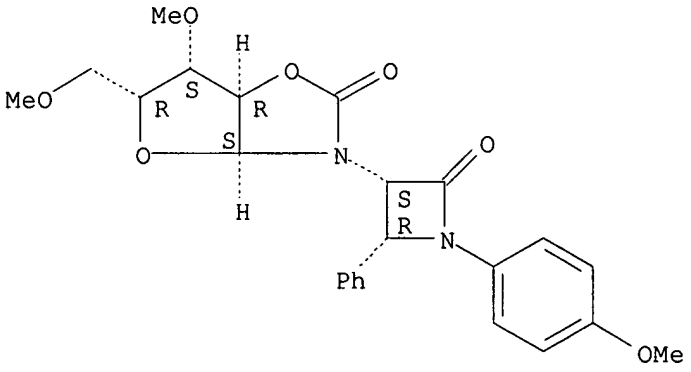


REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:337121 HCAPLUS
DOCUMENT NUMBER: 133:135519
TITLE: Synthesis of a new chiral oxazolidinone auxiliary based on D-xylose and its application to the Staudinger reaction
AUTHOR(S): Saul, Robert; Kopf, Jurgen; Koll, Peter
CORPORATE SOURCE: Department of Chemistry, University of Oldenburg, Oldenburg, D-26111, Germany
SOURCE: Tetrahedron: Asymmetry (2000), 11(2), 423-433
CODEN: TASYE3; ISSN: 0957-4166
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal

LANGUAGE: English
OTHER SOURCE(S): CASREACT 133:135519
AB The synthesis of a new chiral oxazolidinone auxiliary based on D-xylose is described which is employed in diastereoselective Staudinger-type β-lactam syntheses. Using 2-chloro-1-methylpyridinium iodide as the dehydrating reagent, the reaction of auxiliary tethered acetic acid with acyclic or cyclic imines gave the desired β-lactams in good yields with excellent cis- or trans-selectivity depending on the geometry of the imine. X-Ray structure determination of one of the obtained compds. corroborated
the absolute configuration for all cis products.
IT **286435-80-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of a new chiral oxazolidinone auxiliary based on D-xylose and its application to the Staudinger reaction)
RN 286435-80-1 HCAPLUS
CN Furo[2,3-d]oxazol-2(3H)-one, tetrahydro-6-methoxy-5-(methoxymethyl)-3-[(3S,4R)-1-(4-methoxyphenyl)-2-oxo-4-phenyl-3-azetidinyl]-, (3aS,5R,6S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> fil beilstein
FILE 'BEILSTEIN' ENTERED AT 09:45:17 ON 02 FEB 2006
COPYRIGHT (c) 2006 Beilstein-Institut zur Foerderung der Chemischen Wissenschaften licensed to Beilstein GmbH and MDL Information Systems GmbH

FILE LAST UPDATED ON JANUARY 17, 2006

FILE COVERS 1771 TO 2005.
*** FILE CONTAINS 9,428,406 SUBSTANCES ***

>>>PLEASE NOTE: Reaction Data and substance data are stored in separate documents and can not be searched together in one query. Reaction data for BEILSTEIN compounds may be displayed immediately with the display codes PRE (preparations) and REA (reactions). A substance answer set retrieved after the search for a chemical name, a compounds with available reaction information by combining with PRE/FA, REA/FA or more generally with RX/FA. The BEILSTEIN Registry Number (BRN) is the link

between a BEILSTEIN compound and belonging reactions. For mo
detailed reaction searches BRNs can be searched as reaction
partner BRNs Reactant BRN (RX.RBRN) or Product BRN (RX.PBRN).<<<

>>> FOR SEARCHING PREPARATIONS SEE HELP PRE <<<

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**********************************************************************
* PLEASE NOTE THAT THERE ARE NO FORMATS FREE OF COST.                *
* SET NOTICE FEATURE: THE COST ESTIMATES CALCULATED FOR SET NOTICE   *
* ARE BASED ON THE HIGHEST PRICE CATEGORY. THEREFORE; THESE          *
* ESTIMATES MAY NOT REFLECT THE ACTUAL COSTS.                        *
* FOR PRICE INFORMATION SEE HELP COST                                *
**********************************************************************
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NEW

*** PATENT NUMBERS (PN) AND BABS ACCESSION NUMBERS (BABSAN) CAN NOW BE SEARCHED, SELECTED AND TRANSFERRED.**

*** NEW DISPLAY FORMATS ALLREF, ALLP AND BABSAN SHOW ALL REFERENCES, ALL PATENT REFERENCES, OR ALL BABS ACCESSION NUMBERS FOR A COMPOUND AT A GLANCE.**

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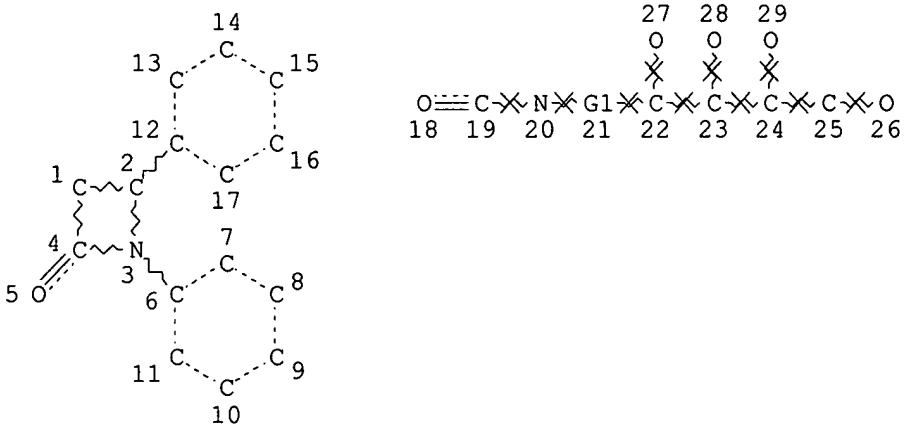


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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  29

STEREO ATTRIBUTES: NONE
L5             1 SEA FILE=BEILSTEIN SSS FUL L1
L6             1 SEA FILE=BEILSTEIN ABB=ON  PLU=ON  L5/COM


=> d l6 ide allref


L6   ANSWER 1 OF 1 BEILSTEIN COPYRIGHT 2006 BEILSTEIN MDL on STN

     Beilstein Records (BRN):        8586283
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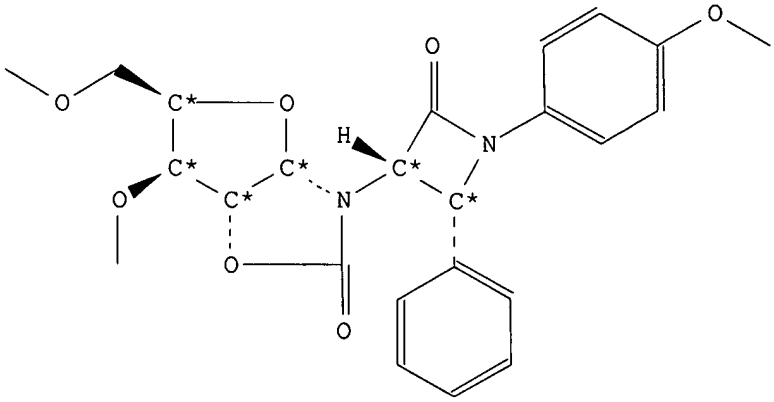
Chemical Name (CN):	1-N-<cis-(3'S,4'R)-2'-oxo-4'-phenyl-1'-(p-methoxyphenyl)-3'-azetidinyl>-1-N,2-O-carbonyl-3,5-di-O-methyl-α-D-xylofuranosylamine
Autonom Name (AUN):	6-methoxy-5-methoxymethyl-3-<1-(4-methoxyphenyl)-2-oxo-4-phenyl-azetidin-3-yl>-tetrahydro-furo<2,3-d>oxazol-2-one
Molec. Formula (MF):	C24 H26 N2 O7
Molecular Weight (MW):	454.48
Lawson Number (LN):	31877, 27709, 14892, 289
File Segment (FS):	Stereo compound
Compound Type (CTYPE):	heterocyclic
Constitution ID (CONSID):	7271356
Tautomer ID (TAUTID):	8075597
Entry Date (DED):	2000/10/24
Update Date (DUPD):	2000/10/24



Field Availability:

Code	Name	Occurrence
BRN	Beilstein Records	1
CN	Chemical Name	1
AUN	Autonomname	1
MF	Molecular Formula	1
FW	Formular Weight	1
LN	Lawson Number	4
FS	File Segment	1
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
DED	Entry Date	1
DUPD	Update Date	1
MP	Melting Point	1
NMR	Nuclear Magnetic Resonance	3
ORP	Optical Rotatory Power	1

This substance also occurs in Reaction Documents:

Code	Name	Occurrence
RX	Reaction Documents	1
RXPRO	Substance is Reaction Product	1

All References:
ALLREF

1. Saul, Robert; Kopf, Juergen; Koell, Peter, Tetrahedron: Asymmetry, CODEN: TASYE3, 11(2), <2000>, 423 - 434; BABS-6242731

=> fil marpat
FILE 'MARPAT' ENTERED AT 09:45:42 ON 02 FEB 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE CONTENT: 1969-PRESENT (VOL 144 ISS 5 (20060127/ED)

SOME MARPAT RECORDS ARE DERIVED FROM INPI DATA FOR 1969-1987

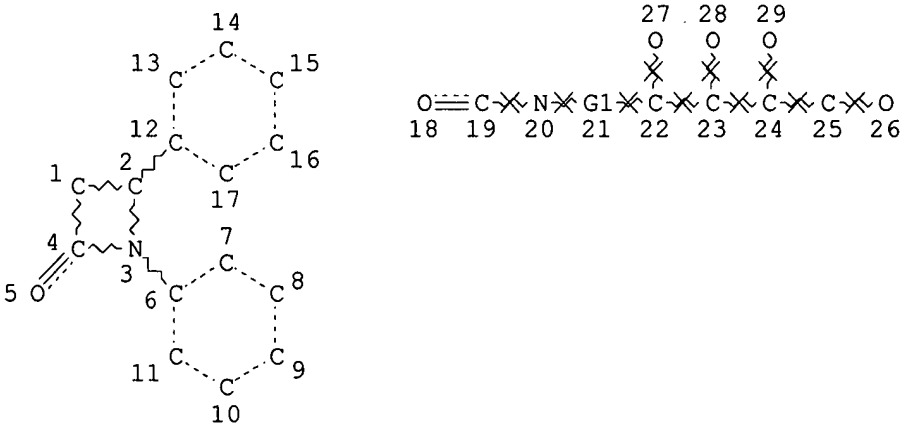
MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6962795 08 NOV 2005
DE 1020040544 17 NOV 2005
EP 1595877 16 NOV 2005
JP 2005328067 24 NOV 2005
WO 2005112644 01 DEC 2005

Expanded G-group definition display now available.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

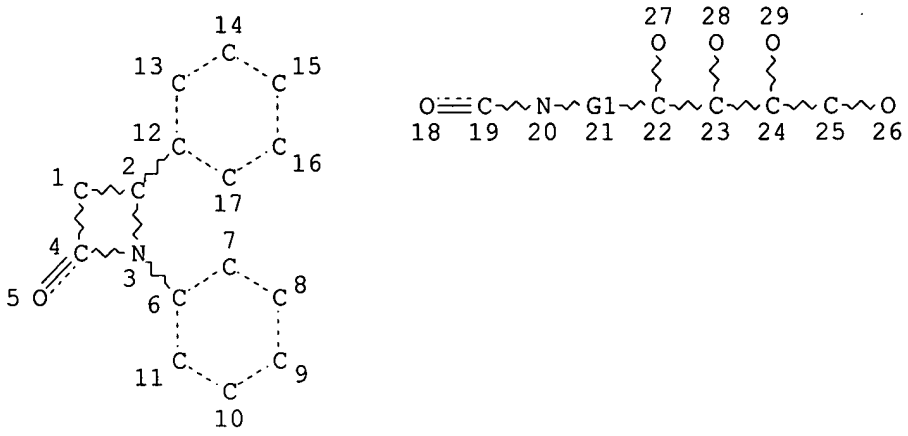
=> d que stat l11
L1 STR



REP G1=(1-3) C
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 29

STEREO ATTRIBUTES: NONE
L3 12 SEA FILE=REGISTRY SSS FUL L1
L4 6 SEA FILE=HCAPLUS ABB=ON PLU=ON L3
L7 STR



REP G1=(1-3) C
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 29

STEREO ATTRIBUTES: NONE
L9 3 SEA FILE=MARPAT SSS FUL L7
L10 2 SEA FILE=MARPAT ABB=ON PLU=ON L9/COM
L11 0 SEA FILE=MARPAT ABB=ON PLU=ON L10 NOT L4